Public Notice

U.S. Army Corps Of Engineers
Galveston District

Permit Application No: 23078
Date Issued: 20 January 2004
Comments Due: 20 February 2004

U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT

PURPOSE OF PUBLIC NOTICE: To inform you of a proposal for work in which you might be interested. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest. We hope you will participate in this process.

AUTHORITY: This application will be reviewed pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act.

APPLICANT:
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AGENT:
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LOCATION: The project is located at on Quintana Island in Brazoria County, Texas, along the Freeport Harbor Channel (Channel) and the Gulf Intracoastal Waterway (GIWW). The project can be located on the U.S.G.S. quadrangle map entitled: Freeport, Texas. Approximate UTM Coordinates: Zone 15; Easting: 275192; Northing: 3203304.

PROJECT DESCRIPTION: The applicant proposes to construct, operate, and maintain structures and equipment necessary for a liquefied natural gas (LNG) receiving and transportation facility. The Project is designed for the importation, storage, and delivery of foreign-source LNG to natural gas markets. The Project will be located near Freeport, Texas, and surrounding areas, and much of it will be on property leased from the Brazos River Harbor Navigation District, Port of Freeport, on Quintana Island. Large LNG ships (generally greater than 1,000 feet in length) will off-load LNG at a new marine terminal to be constructed by expanding an existing dredged harbor on Quintana Island. The terminal will have the capability of unloading up to 200 ships per year.

LNG will be transported by vacuum-jacketed, cryogenic service pipe to cryogenic service storage tanks where it will be stored in a liquefied state at atmospheric pressure. To condition the LNG for the intrastate pipeline market, the LNG will be pressurized by pumps and vaporized in heat exchangers to pipeline quality natural gas. No additional compression will be required above the exchanger output pressures for gas transport. Natural gas will be sent out of the terminal facilities at a rate of up to 1.5 billion cubic feet per day (Bcf/d) via a 9.58-mile long, 36-inch diameter natural gas send out pipeline. The send out pipeline will transport the natural gas to the meter station located near Stratton Ridge approximately 9 miles northeast of Quintana Island.

The Project will consist of four (4) primary components:

- Marine terminal and LNG transfer lines;
- LNG storage and vaporization facility
- Natural gas send out pipeline, metering stations, and associated appurtenances
- 138 kV electric utility line

The proposed 45.69-acre marine terminal site located on Quintana Island at the convergence of the GIWW and the Channel and will include a docking slip, maneuvering area, unloading dock, and two LNG transfer lines. These transfer lines will traverse a distance of 0.9 miles, carrying LNG from the marine terminal to the storage and vaporization facility site, which is the second component of the project. The storage and vaporization facilities will be constructed on a 140.39-acre plot that lies southwest of the marine terminal on Quintana Island, bordering the GIWW to the north. The third component is a 9.58-mile, 36-inch diameter send-out pipeline that transports vaporized natural gas from the storage and vaporization site to a 3.8-acre metering station near Stratton Ridge, Texas. The fourth component of the project involves the construction of a 3.9 mile 138 kV electric utility line required to service the LNG terminal that will cross the GIWW adjacent to and above the FM 1495 bridge.

Construction of the marine terminal will involve an expansion of the existing 16.27-acre docking slip and maneuvering area to accommodate large LNG ships. The existing slip is currently eight to 12 feet deep and located at the GIWW-Channel convergence. This area will be expanded to 24.79 acres by dredging 8.52 acres of adjacent upland. The expanded slip will be 1,550 feet long and will range in width from 1,200 feet at the entrance to 450 feet at the end. However, most of the slip dredging will be in the slip area perpendicular to the Channel to increase its depth to -45 mean low tide (MLT). Construction of the docking slip will require the relocation of a portion of the existing storm protection levee (SPL) toward the south. Approximately 103,000 cubic yards (yds^3) of earth will be relocated to recreate the SPL. The currently submerged maneuvering area, which is located to the north of the Channel and opposite from the slip, will also be dredged to a depth of -45 MLT to match the depth of the Channel.

Expansion of the docking slip and maneuvering area will generate approximately two million yds^3 and approximately 200,000 yds^3 of dredged material respectively. The top few feet (approximately 150,000 yds^3) of the upland area within the slip expansion are expected to be mechanically excavated and transported to the storage and vaporization facility to be used as fill. The remaining areas will be hydraulically dredged using a pipeline dredge that will excavate and pump dredged material to one of the three existing Port controlled dredge material placement areas (DMPAs), for which dredged material deposition has been authorized by the U.S. Army Corps of Engineers (USACE). The dredged material will consist mostly of stiff virgin clays with some sands and silts.

The marine terminal will also include reinforced concrete breasting and mooring dolphins, which will be required to safely berth and moor the full range of ships potentially using the slip area. The LNG unloading dock will be a one-level reinforced concrete beam and slab structure approximately 92 feet wide by 114 feet long supported on piles. Six mooring dolphins and four breasting dolphins will be constructed. The dock will be curbed and its surface will be sloped to a collection point to confine LNG spillage. Construction of docking and unloading facilities will occur in a previously disturbed area.

To facilitate construction of the storage and vaporization units, a 200-foot-long sheet pile dock will be built at the northeast corner of the LNG storage and vaporization site for offloading of the large quantities of bulk materials. The proposed dock location is approximately 200-250 feet off of the GIWW. The area between the dock and the GIWW will be hydraulically dredged to minus 12 feet MLT with one foot of allowable over-depth. The approximately 185,000 yds^3 of dredged material will be pumped to an existing DMPA operated by the Port and authorized by the USACE. The construction dock will be a permanent installation for use in any possible future expansion of the site facilities.

The natural gas pipeline will originate at the pig launcher within the storage and vaporization facility and traverse a distance of approximately 9.58 miles to its terminus at the gas meter station near Stratton Ridge, Texas. The Natural gas pipeline will be a 36-inch outside diameter, carbon steel pipe. An open-cut method of construction will be used for approximately 4.3 miles of the pipeline route. Three waterbody crossings and one marsh crossing will be accomplished using Horizontal Directional Drilling (HDD) methods to minimize impacts to these areas.

Construction of a 138 kV electric utility line will be required to service the LNG terminal with electric power. The electric line route originates at the intersection of SH 288 and FM 1495 at the Center Point Energy substation. The corridor follows FM 1495 south to CR 793. This portion of the route is collocated with existing utilities along the west side of FM 1495. The electric line will cross the GIWW adjacent to and above the existing bridge on FM 1495. Along CR 793, the power supply route will be collocated with existing utilities along the north side of CR 793 to the storage and vaporization site. The total route length will be approximately 3.90 miles.

IMPACTS TO JURISDICTIONAL WETLANDS AND WATERS: The project will impact approximately 89.68 acres of jurisdictional wetlands, which includes 47.88 acres of wetlands that will be permanently impacted and 41.80 acres of wetlands that will be temporarily impacted during construction activities. The breakdown of impacts to wetlands is as follows:

- 12.50 wetland acres will be dredged during construction of the marine terminal consisting of 6.51 acres of palustrine and 5.99 acres of estuarine wetlands. An additional 4.07 acres of estuarine wetlands will be temporarily impacted during construction activities of the marine terminal.

- 35.38 acres of palustrine wetlands will be filled during the development of the storage and vaporization site.

- 28.92 acres of wetland will be temporarily excavated and restored during construction of the 36-inch send-out pipeline.

- 8.81 acres of wetland will be temporarily impacted during placement of the electric line poles consisting of 2.75 acres of impact to estuarine wetlands and 6.06 acres of impact to mud/salt flats adjacent to an existing DMPA.

Open cut method of pipeline construction will also temporarily impact two unnamed tributaries of Salt Bayou less than 10 feet in width and 1.8 miles of open water in the borrow ditch along the Velasco SPL along CR 690. Other pipeline impacts will be avoided by using HDD instead of open-cut construction for crossing 5,200 feet of marsh, the Freeport Harbor Channel, GIWW, and Oyster Creek.

A six-acre wetland at the proposed storage and vaporization facility will be recreated from an existing wetland area after construction is complete. This wetland will be located between Lamar Street and the new storm protection levee at the storage and vaporization site. Vaporization of LNG will generate condensed atmospheric water, the amount of which will vary greatly depending mainly on ambient air temperature, humidity, and LNG throughput. The volume of fresh water generated is approximately 1 million gallons per 24-hour period during peak summer output. The temperature of the water produced will be between 50 and 65 degrees Fahrenheit. The water will be discharged into the recreated wetland. At peak output, the average volume of discharge would add the equivalent of about one-quarter-inch depth to the wetland. Should all of the output for 1 day (1 million gallons) occur in a single hour, the water would add the equivalent of approximately 6 inches of depth.

The applicant maintains that temperatures of discharged waters are not expected to impact fishery and wildlife resources within the wetland. The wetland is designed to bring the water to ambient temperature as quickly as possible upon entering the wetland system. The wetland design includes a shallow pond located at the wetland discharge point. From the pond, the water would sheet out across a freshwater palustrine wetland. By maintaining a reduced water depth and sheeting it out thinly over a larger grassed area, it will gain thermal input from solar incidence, solar radiation, soils, and from ambient air and reach near ambient temperatures rather quickly.

By design the wetland will maintain a hydric regime and utilize as much of the water internally as possible, thus reducing the discharge of water to the GIWW. Factors such as evaporation, absorption into the soils, and evapotranspiration through plant material will further reduce the amount of water that will make its way out of the system. During non-peak periods, water will be maintained in the ponded area and percolate into the surrounding wetland area, thus picking up heat from the soil.

WETLAND MITIGATION: A wetland mitigation plan has been developed to address the disturbance and/or loss of wetlands and habitat from construction and operation of the proposed facilities. To enhance shoreline habitat at the Project site, Freeport LNG proposes to establish stands of smooth cordgrass (S*partina alterniflora*) in two locations for a total of 14.1 acres. The primary objective for the proposed mitigation sites is to stabilize shorelines and prevent erosion; however creation of marshlands in these areas also will create and improve habitat for fish and wildlife species.

The first of the proposed shoreline enhancement areas is located along the southern edge of the GIWW at the storage and vaporization site. This area is tidally influenced and shallow, maintaining only a few feet of depth until reaching the dredged portion of the GIWW. *S. alterniflora* has been used successfully throughout the Texas and Louisiana Gulf coast for both habitat enhancement and erosion control. The current shoreline at the project site has eroded considerably and substrate within the intertidal area is mostly unvegetated. Establishing a dense stand of *S. alterniflora* would greatly improve the functional value of this wetland area.

The second on-site mitigation area is located near the proposed marine terminal. The area consists of a sparsely vegetated, man-made, brackish pond. Construction of the berthing area would require this area to be opened to the GIWW and Channel, creating opportunity for establishing wetland vegetation within the pond, which currently supports little to no vegetation. In addition, shoreline areas outside of the actual docks and berthing areas will also be planted with *S. alterniflora*.

S. alterniflora will be planted using established transplant methods. Specific performance targets for area and density will be established based on consultations with the Corps of Engineers and as specified in the anticipated 404 permit.

A proposed off-site mitigation plan includes the preservation of an approximate 76.75-acre tract that includes approximately 57.57 acres of wetland and 19.18 acres of upland habitats on the southern end of Follets Island, adjacent to Drum Bay, in Brazoria County, Texas. Follets Island is a barrier island located across San Luis Pass, southwest of Galveston Island (at 29°03' N, 95°10' W). The site is located approximately 12 miles east of the impact area and within the same ecological region. The general goal for mitigation at the off-site mitigation area is to preserve and enhance wildlife habitat associated with Drum Bay and the coastal marsh habitats adjacent to the site.

PIPELINE MITIGATION: Freeport LNG will conduct pre-construction surveys of the proposed right-of-way in wetlands to determine pre-project contours, elevations, vegetation types and vegetative cover. This survey will also include aerial photography of the right-of-way and an area 150 feet wide on either side of the right-of-way with a GIS analysis overlay of the ground truthed surveys. The purpose of the additional aerial survey 150 feet outside of the right-of-way is to document existing conditions, in case impacts exceed the area identified as the work corridor.

After construction, the pipeline right-of-way, including all vehicle tracks inside and outside the identified work corridor, will be restored to pre-project contours and elevations. The impacted wetlands will also be replanted with appropriate native vegetation on 6-foot centers. A survey of the transplants will be conducted 60 days post-planting to determine percent survival. If 50 percent survival of the transplanted material is not achieved, then a second planting effort will be conducted.

Aerial photography and an elevation survey of the restored right-of-way will be conducted within one month upon completion of restoration activities. This information will be evaluated in a GIS analysis that compares pre-project conditions. Upon completion of the survey, a report detailing the restoration activities and the resulting contours and elevations will be submitted to NOAA Fisheries.

Aerial photography and post-construction elevation and vegetation surveys will also be conducted two years (end of second growing season) after pipeline installation to determine the success of the restoration activities. These surveys will be compared to the pre-project surveys in a GIS analysis to determine acreage of marsh restored and impacted. If the right-of-way is not restored to pre-project conditions, then either remedial actions or mitigation will be conducted. For areas that are not at suitable elevations, remedial measures to restore the wetlands elevations will be conducted. If practicable remedial measures are not available, then Freeport LNG will mitigate all wetland impacts off site at a 2:1 creation to impact ratio.

A project location map and overall plans are attached in 11 sheets. The remaining 25 project sheets, 13-page mitigation plan, and pipeline alignment sheets are available on the USACE website at www.swg.usace.army.mil/reg. You may also obtain a hardcopy of the project plans upon written request to the Project Manager cited on page 7 of this notice.

NOTES: This public notice is being issued based on information furnished by the applicant. This information has not been verified.

A preliminary review of this application indicates that an Environmental Impact Statement (EIS) is required. The Federal Energy Regulatory Commission (FERC) is the Federal agency responsible for authorizing applications to construct and operate LNG import facilities. As such, the FERC is the lead Federal agency for the preparation of an EIS in compliance with the requirements of the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality (CEQ) regulations for implementing NEPA (40, Code of Federal Regulations (CFR) 1500-1508) and the FERC's regulations implementing NEPA (18 CFR 380). The USACE, U.S. Fish and Wildlife Service, and NOAA Fisheries are cooperating agencies for the EIS. A cooperating Federal agency has jurisdiction by law or special expertise with respect to environmental impacts involved with the proposal.

Additional information about the Project is available from the Commission's Office of External Affairs, at **1-866-208-FERC** or on the FERC Internet website (www.ferc.gov) using the eLibrary link. Click on the eLibrary link, click on "General Search" and enter the docket number (CP03-75). Be sure you have selected an appropriate date range. The Draft EIS was issued on November 7, 2003. For assistance with eLibrary, the eLibrary help line can be reached at 1-866-208-3676, TTY (202) 502-8659 or at FERCONLINESUPPORT@FERC.GOV. The eLibrary link on the FERC Internet website also provides access to the texts of formal documents issued by the Commission, such as orders, notices, and rulemakings.

Our evaluation will also follow the guidelines published by the U.S. Environmental Protection Agency pursuant to Section 404 (b)(1) of the Clean Water Act (CWA).

OTHER AGENCY AUTHORIZATIONS: Texas Coastal Zone consistency certification is required. The applicant has stated that the project is consistent with the Texas Coastal Management Program goals and policies and will be conducted in a manner consistent with said Program.

STATE WATER QUALITY CERTIFICATION: Texas Railroad Commission Section 401 Clean Water Act, water quality certification is required.

NATIONAL REGISTER OF HISTORIC PLACES: The staff archaeologist has reviewed the latest published version of the National Register of Historic Places, lists of properties determined eligible, and other sources of information. The following is current knowledge of the presence or absence of historic properties and the effects of the undertaking upon these properties:

> The permit area is likely to yield resources eligible for inclusion in the National Register of Historic Places. An investigation for the presence of potentially eligible historic properties is justified.

THREATENED AND ENDANGERED SPECIES: Preliminary indications are that no known threatened and/or endangered species or their critical habitat will be affected by the proposed work.

ESSENTIAL FISH HABITAT: This notice initiates the Essential Fish Habitat consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Our initial determination is that the proposed action would not have a substantial adverse impact on Essential Fish Habitat or Federally managed fisheries in the Gulf of Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

PUBLIC INTEREST REVIEW FACTORS: This application will be reviewed in accordance with 33 CFR 320-330, the Regulatory Programs of the Corps of Engineers, and other pertinent laws, regulations and executive orders. The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the proposal, will be considered: among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs and, in general, the needs and welfare of the people.

SOLICITATION OF COMMENTS: The Corps of Engineers is soliciting comments from the public, Federal, State, and local agencies and officials, Indian tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Impact Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

This public notice is being distributed to all known interested persons in order to assist in developing facts upon which a decision by the Corps of Engineers may be based. For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition.

PUBLIC HEARING: Prior to the close of the comment period any person may make a written request for a public hearing setting forth the particular reasons for the request. The District Engineer will determine whether the issues are substantial and should be considered in the permit decision. If a public hearing is warranted, all known interested persons will be notified of the time, date, and location.

CLOSE OF COMMENT PERIOD: All comments pertaining to this Public Notice must reach this office on or before **20 February 2004**. Extensions of the comment period may be granted for valid reasons provided a written request is received by the limiting date. **If no comments are received by that date, it will be considered that there are no objections**. Comments and requests for additional information should be submitted to:

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